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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/673,250	09/30/2003	Niklas Axen	1510-1066	2853

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EXAMINER
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WOOD, ELIZABETH D

ART UNIT	PAPER NUMBER
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1755

DATE MAILED: 09/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/673,250

Applicant(s)

AXEN ET AL.

Examiner

Elizabeth D. Wood

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 30 June 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 31-70 is/are pending in the application.
- 4a) Of the above claim(s) 46, 49, 52, 55, 58, 61, 64 and 67 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 31-45, 47, 48, 50, 51, 53, 54, 56, 57, 59, 60, 62, 63, 65, 66 and 68-70 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

***Oath/Declaration***

The corrected Declaration is hereby acknowledged.

***Specification***

The examiner has not checked the specification to the extent necessary to determine the presence of **all** possible minor errors (grammatical, typographical and idiomatic). Cooperation of the applicant(s) is requested in correcting any errors of which applicant(s) may become aware of in the specification, in the claims and in any future amendment(s) that applicant(s) may file.

Applicant(s) is also requested to complete the status of any copending applications referred to in the specification by their Attorney Docket Number or Application Serial Number, **if any**.

The status of the parent application(s) and/or any other application(s) cross-referenced to this application, **if any**, should be updated in a timely manner.

***Abstract***

The abstract provided June 30, 2005 is hereby acknowledged and has been entered.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 31-45, 47, 48, 50, 51, 53, 54, 56, 57, 59, 60, 62, 63, 65, 66 and 68-70 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to

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particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Applicant has amended the claims to recite "CA and C<sub>12</sub>A<sub>7</sub> together" but this is still confusing because of the "more than 50 vol.%" modifier. It is unclear which phase (or both) such is in reference to. The language "a mixture of" would alleviate this problem.

Claim 70 refers to an "effective amount" for achieving "high" temperatures. These are relative terms with no point of reference. Since "high" is not defined, there is no way to determine that temperature which would be "effective".

#### ***Election/Restriction***

New claims 46, 49, 52, 55, 58, 61, 64 and 67 are withdrawn from consideration as being directed to a non-elected invention in accordance with the restriction requirement of November 19, 2004.

#### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.

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2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 31-33, 36, 39-45, 47, 48, 50, 51, 69 and 70 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 4,652,593 to Kawahara et al. for the same reasons set forth in the previous office action (which rejected claims 1, 5, 8, 9 and 11-22).

Claims 34-38, 53, 54, 56, 57, 59, 60, 62, 63 and 65-68 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawahara et al. as applied to the claims above, and further in view of SE 010441-1 for the same reasons set forth in the previous office action (which rejected claims 3, 4, 6, 7 and 10).

Claims 31-33, 36, 39-45, 47, 48, 50, 51, 69 and 70 are rejected under 35 U.S.C. 103(a) as being unpatentable over SE 463,493 for the same reasons set forth in the previous office action (which rejected claims 1, 2, 5-8 and 12-22).

Claims 34-38, 53, 54, 56, 57, 59, 60, 62, 63 and 65-68 are rejected under 35 U.S.C. 103(a) as being unpatentable over SE 463,493 as applied to the claims above and further in view of SE 010441-1, for the same reasons set forth in the previous office action (which rejected claims 3, 4 and 9-11).

Claims 31-45, 47, 48, 50, 51, 53, 54, 56, 57, 59, 60, 62, 63, 65, 66 and 68-70 are rejected under 35 U.S.C. 103(a) as being unpatentable over SU 010441-1 for the same reasons set forth in the previous office action (which rejected claims 1-22).

#### ***Double Patenting***

The obviousness-type double patenting rejection over copending application SN 10/739,266 is withdrawn in view of the abandonment of that application.

#### ***Response to Arguments***

Applicant's arguments filed June 30, 2005 have been fully considered but they are not persuasive.

Applicant's arguments with respect to all of the rejections of record would appear to indicate that applicant believes that patentability resides in the failure of the prior art of record to specify suitable ranges for the calcium aluminate phases, and they would not therefore provide a person skilled in the art to control the temperature generation in the material.

This line of reasoning, however is not convincing. As asserted in the previous office action, the instant claims include "0" for most of the claimed phases. Accordingly, the only phases that need be present are CA and  $C_{12}A_7$ , and these phases are taught

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by the references in the recited amounts. As a result, any temperature generation must be considered inherent to the composition of the references. There is no evidence on this record that a composition that does not contain C3A can have the effects asserted by applicant, but the instant claims include zero for this component. There is no evidence on this record that a composition that does not contain CA2 can have the effects asserted by applicant, but the instant claims include zero for this component. Accordingly, the applicant is arguing an inherent, intended use limitation, but the compositional limitations required to achieve such a recitation are not present in the claims. Accordingly, the examiner can only conclude that the prior art will share this characteristic absent some convincing evidence to the contrary.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elizabeth D. Wood whose telephone number is 571-272-1377. The examiner can normally be reached on M-F, 5:30-2:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo can be reached on 571-272-1233. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Elizabeth D. Wood  
Primary Examiner  
Art Unit 1755

edw